

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/07/00
Date Received: 03/23/00
Project: Metro Self Monitor, PO# M63796
Date Extracted: 03/27/00
Date Analyzed: 03/28/00

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE
FOR TOTAL METALS BY
INDUCTIVELY COUPLED PLASMA (ICP)
(METHOD 6010)**

Results Reported as mg/L (ppm)

<u>Sample ID</u> Laboratory ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M63796 003154-01	0.20	0.19	0.21	<0.05
Method Blank	<0.05	<0.05	<0.05	<0.05

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QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 003154-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.20	0.22	10	0-20
Copper	mg/L (ppm)	0.19	0.21	10	0-20
Nickel	mg/L (ppm)	0.21	0.21	0	0-20
Zinc	mg/L (ppm)	<0.05	<0.05	nm	0-20

Laboratory Code: 003057-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	RPD
Chromium	mg/L (ppm)	5	0.20	98	99	80-120	1
Copper	mg/L (ppm)	5	0.19	97	95	80-120	2
Nickel	mg/L (ppm)	10	0.21	95	98	80-120	3
Zinc	mg/L (ppm)	5	<0.05	100	106	80-120	6


Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD
Chromium	mg/L (ppm)	5	99	97	80-120	2
Copper	mg/L (ppm)	5	96	94	80-120	2
Nickel	mg/L (ppm)	10	100	98	80-120	2
Zinc	mg/L (ppm)	5	101	99	80-120	2



nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

#003154

SAMPLE CHAIN OF CUSTODY

SITE NO.	PROJECT NAME	PURCHASE ORDER #
7238	Metro Self monitor	M 63796
SAMPLES (signature)	PROJECT LOCATION	
	3200 6th Ave S	
REMARKS	SAMPLE DISPOSAL INFORMATION	
	<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Return Samples <input type="checkbox"/> Call for Instructions	

[illegible]

SIGNATURE	PRINT NAME	COMPANY	Date	Time
Relinquished by: 	Gerald A. Thomas	ACW	3/23/00	1250
Received by: 	Carlos Barros	FRB	3/23/00	12:50
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Jensen, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
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FAX: (206) 283-5044
e-mail: fbi@isomedia.com

April 7, 2000

DUPLICATE COPY

INVOICE #00ACU0407-1

Accounts Payable
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M63796 - Results of testing requested by
Gerald A. Thompson for material submitted on March 23, 2000.

1 sample analyzed for Total Chromium,
Copper, Nickel, and Zinc
by Method 6010 @ \$80 per sample

\$ 80.00

Amount Due

\$ 80.00

FEDERAL TAX ID (b) (6)

FRIEDMAN & BRUYA, INC.

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3012 16th Avenue West
Seattle, WA 98119-2029
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e-mail: fbi@isomedia.com

April 7, 2000

Gerald A. Thompson, Project Manager
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on March 23, 2000 from your Metro Self Monitor, PO# M63796 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Dianne C. Hurt
Project Manager

Enclosures
ACU0407R.DOC